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# Recollections of Glasgow and its University

BY

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# RECOLLECTIONS OF GLASGOW AND ITS UNIVERSITY.

By A. FREELAND FERGUS, M.D., LL.D., F.R.F.P.S.G.

I HAVE been asked by the Editors of the *Glasgow Medical Journal* to contribute something to the Centenary issue of that magazine, and I am glad to communicate some of my recollections of life in the city of Glasgow and at its University.

## EARLY RECOLLECTIONS.

For many years my father was engaged as a medical practitioner in the city. He took some interest in public affairs, for he was a member of the Corporation; he represented the Exchange Ward, and took a warm interest in Public Health administration. We talk of the Glasgow slums at present, and no doubt they are bad enough, but they are absolutely nothing to what they were in my early childhood. A book of photographs was published by the Corporation giving some views of closes entering from High Street. This volume will give to the younger generation an idea of the terrible state of affairs in that part of Glasgow. The Anderston district was no better. There were many houses consisting of only one apartment. My father worked a great deal in the Anderston district as a young man, and I remember one of his anecdotes; it was to the effect that two families each resided in a house of one room, but one room entered off the other, and each room was occupied as a separate house. No one could get into the inner house without going through the outer. Typhus fever broke out in the inner house, and the people of the outer house would not let anybody pass out and in through their premises, and my father, in making a visit as a medical practitioner in charge of that district under the health authority, had to avail himself of the window as a means of ingress and egress. Fortunately the premises were on the ground floor. Out of one tenement in the Anderston district he sent no fewer than sixty persons, in a single winter, to the hospital, smitten with typhus fever. Part of his armamentarium was a thick stick with which he broke panes of glass to let in fresh air.

Both he and my mother, who spent her girlhood in Glasgow, had some weird tales of the cholera epidemics of bygone days, some of the incidents recalling very much Defoe's description of the plague in London in the year 1665. The victims were in great part buried in common pits, and dead-carts, in one of the epidemics of cholera, were to be seen going their rounds in the streets of Glasgow. The fever hospital to which my father sent his typhus patients was part of the Glasgow Royal Infirmary, and it is odd to find in one of the Annual Reports of that institution that the Directors congratulated the subscribers and themselves on the fact that a new building had been erected, and that when it was not used for fever cases it would do very well to take in the overflow from the surgical wards. That happened in the 'sixties, at a time when Lord Lister was one of the surgeons to the hospital.

## Gairdner and Public Health Administration.

The Corporation of Glasgow has tackled many of the serious problems with which it has had to deal in a thoroughly satisfactory manner. For the most part the Lord Provosts who have held office during my lifetime have been thoroughly good, practical men, but two, in connection with Public Health matters, deserve special mention. The one was Lord Provost Stewart, under whose auspices Loch Katrine water was introduced into Glasgow in the year 1859, and the other was Lord Provost John Ure, who, as Chairman of the Health Committee, revolutionised the sanitary condition of Glasgow and was almost entirely responsible for the diminution of the appalling death-rate of, say, fifty years ago to its present moderate dimensions.

The Public Health Department of Glasgow has always been a particularly strong one, and the position of Medical Officer of Health to the City of Glasgow has been filled by men of the first rank in Public Health matters. Sir William Gairdner was the first Medical Officer of Health. He was a man of very wide scholarship and of all-round ability, and to him, in the early stages, the organisation of the department was chiefly due. Gairdner used to say that the chief thing he had done for Glasgow was the discovery of Dr. J. B. Russell, who succeeded him as Medical Officer of Health. Probably no one was held in greater esteem and was looked upon as more authoritative than Dr. Russell by those interested in sanitation. He was succeeded by Dr. A. K. Chalmers, who, for some years, had been his colleague. The Public Health Department of Glasgow, founded by Gairdner and Russell, made steady and substantial progress under the care of Dr. Chalmers. It still maintains its high position as being one of the best Public Health Departments of any city in the country.

My friend Dr. Marshall of Rothesay relates a story of Sir William Gairdner which is of interest. Sir William told his class that at one time in his early administration as Medical Officer of Health there was great fear of the outbreak of cholera in the city. As a precautionary measure Gairdner shut all the private wells which still existed in the town, thus compelling the inhabitants to use the public supply drawn either from Loch Katrine or from the Gorbals water works. No doubt it cost some money, and a member of the Corporation some considerable time afterwards complained of the expense, and wound up his complaint by saying, "And the cholera never came." Had there not been a proper water supply, it would almost certainly have invaded the city and have carried off a considerable proportion of the inhabitants.

Amongst the many beneficial changes introduced by Mr. Ure and Sir William Gairdner into Glasgow was the measurement of the cubic space in the slum dwellings and the passing of regulations that the number of inhabitants to be allowed in a house was to be strictly according to the ascertained cubic space. A ticket was put on the door of each house in the slum areas stating the number of cubic feet which it contained.

Gairdner was a witness for the Crown in the celebrated Pritchard trial. His evidence was characteristic of the man; he had made a mistake in diagnosis, and he plainly stated that fact in the witness-box without any hedging. When he saw Mrs. Pritchard, at the request of her husband, he came to the conclusion that she was intoxicated, and he formed that opinion because she was inveighing so much against her husband, whom he had always regarded as an honourable and trustworthy practitioner. Given a sick woman wildly blackguarding her husband who was supposed to be a man of high standing, Sir William Gairdner's diagnosis was a perfectly reasonable and legitimate one on first seeing the patient. He was the soul of honour and truthfulness, and ultimately resigned his Chair because his eyesight had very much failed, and he was no longer able to see objects, particularly bacteria under the microscope. His range of knowledge was wide and scholarly, and from that point of view his lectures were most interesting.

## THE OLD UNIVERSITY AND THE HUNTERIAN MUSEUM.

Now as regards other recollections, I have a fairly distinct recollection of a visit to the old University buildings in the High Street when I was quite a young child, I suppose about 8 or 9. My mother had, at one time, been intimately acquainted with some of the professors who lived in houses which formed part of the College buildings, and she took it into her head that she should like to see the place once more before it was pulled down, so a pilgrimage was made from our house in Elmbank Street to the University buildings. I remember perfectly well the building which contained the Hunterian collection. At the same visit I well remember seeing a bust of Zachary Boyd which stood in a niche between the inner and the outer quadrangles. William Hunter, in his will, not only left his museum to the University of Glasgow but left a considerable sum of money to be spent on putting up accommodation for its reception. When the University was moved to Gilmorehill no special building was erected for it, but it was housed, and fairly adequately housed, in that part of the building situated on the north side of the east quadrangle. The lower hall was, in my time at College, used as a Chapel and also for capping ceremonies and for other public functions; neither the Bute Hall nor the Randolph Hall had then any existence, nor was there any Students' Union. Undoubtedly if the museum was not properly housed it was not the fault of Mr. John Young, the Curator. He was a very good field naturalist, keen on geology, and a man who took a pride in his work as Curator of the Museum. Most of the students had practically no access to the collections. Every student, however, on matriculating found that his matriculation ticket entitled him to pay one visit in the course of a session to the Hunterian Museum. I daresay had any student desired to have more frequent access the Curator would very willingly have made arrangements for his admission, but few students were much interested in the collections contained in the Museum, and most of them were quite unaware of the great value of its contents, though some of us did make a tolerably close inspection of the zoological specimens.

## "COCKIE YOUNG."

The celebrated John Young, M.D., better known as "Cockie Young," was the Professor of Zoology, as also of Geology, and was by no means a good teacher of students. His lectures seemed to me at any rate to be quite uninstructive. One good quality he had, however; he was a first-rate draughtsman, and distributed to his students drawings from his own pencil of the various objects on which he was supposed to be lecturing. Under these circumstances, for examination purposes, I found a harbour of refuge in the zoological collections of the Hunterian Museum. The students who attended the class of Zoology had special tickets admitting them to the Museum. Regular visits to that, going over the cases carefully with a book on zoology by Nicholson of Aberdeen, helped me to meet the examiners with success when the day of trial came. There was, in my time, no practical class in zoology; we had a ravelled lecture at eight o'clock in the morning during the summer session, and we were left to our own resources to get any further information in the subject.

Professor Young had devoted a considerable time to geology, and taught that subject during the winter. He had a good deal of caustic mother-wit in him, but he certainly, so far as zoology was concerned, should never have been put to teach the subject to medical students.

One incident in "Cockie's" career may here be mentioned. At that time there was always a formal opening of the winter session with an address by the Very Reverend Principal Caird. These addresses were always interesting and frequently important. On one occasion the professorial procession had entered the hall and taken their seats. "Cockie Young" sat down and began to stare all around him in an attempt to identify the students who were disturbing the peace. John Caird rose to begin the devotions, and had only uttered the two words, " Pater omnipotens," when a student, no doubt anxious to promote the devotional feeling of the meeting, called out " Shut your eyes, Cockie."

## ALLEN THOMSON.

At that time the first professional examination was in the subjects of Anatomy, Zoology, Botany, and Chemistry. Allen Thomson, who taught Anatomy, was a member of a very distinguished family. His father had been a professor in the Medical Faculty of the University of Edinburgh; his brother was Professor of Medicine in Glasgow; and Allen Thomson's son, fortunately still with us, was for many a day the Professor of Chemistry in King's College, London. I was with Allen Thomson during his last summer session, and listened to the last lecture he ever gave. On that occasion he lectured up till the bell had ceased to ring at the end of the hour; he retired without saying a single word about his leaving the University, although his retirement had been announced in all the local papers. When he had finished he at once quitted the lecture-room, but the students rose *en masse* and raised cheer after cheer. He came back again, and, after quiet was restored, said that there were certain occasions in every man's life about which a man did not care to speak, and the leaving of the University was to him one of these occasions. He was a brilliant lecturer, with a thorough command both of his subject and of the English language; withal a courtly and courteous gentleman. There is a good story told of him. He was Professor of Physiology in the University of Aberdeen before he came to Glasgow, and when he got the Chair in Aberdeen he was required to sign the Westminster Confession of Faith. His own views were not supposed to be in accordance with that ancient and revered document, issued from Westminster in 1643. Somebody asked Dr. Thomson if he had signed the Westminster Confession of Faith, and he replied in the affirmative. Then the same person pursued his inquiries by asking if he, Dr. Thomson, believed the doctrine contained in the Westminster Confession of Faith, to which he replied that the Westminster Confession of Faith contained all that he believed.

A somewhat similar incident occurred when Edmund Law

Lushington was appointed to the Chair of Greek in succession to Dr. Sandford. The Reverend Principal of the University was a Presbyterian clergyman and much interested in doctrinal standards. A copy of the Westminster Confession of Faith was put before Mr. Lushington. As the newly-appointed Professor prepared to sign the document, the Principal asked him, "Have you read the Westminster Confession of Faith?" and got for reply, "The law of the land compels me to sign the Westminster Confession of Faith; it does not compel me to read it."

The two other professors who had to do with the preparation for the first professional examination were Dr. Alexander Dickson, in the Chair of Botany, and John Ferguson, in the Chair of Chemistry.

## Dickson the Botanist.

Dr. Dickson was a landed proprietor; he was Dickson of Hartree, in the neighbourhood of Biggar, and was a generous-hearted, lovable man. He certainly did his best to teach the botany of that time—be it said, a totally different proposition from the botany of to-day. There was no practical laboratory, and only on one or two occasions were there microscopic demonstrations. He was a remarkably good field botanist, and took infinite pains with such students as cared to attend his excursions, which took place on the Saturdays during the short summer term. The zeal seemed to lag as the day wore on, and each place of refreshment thinned the ranks of the botanists, till at last few remained to accompany the still enthusiastic Professor. Unfortunately he did not keep the class in thoroughly good control, and it is much to be regretted that there was a good deal of rowdyism which he ought to have been spared. He was a highly nervous but not irritable man, and unquestionably was of the kindest disposition towards his students. On one subject he was specially loquacious and, for aught I know, authoritative, and that was the phyllotaxis of fir cones. In my year he lectured for several days on his favourite, but to us very uninteresting, subject. At last we put an end to it by the methods usually adopted by students, when he restored the harmony of the proceedings by assuring us that there would be no question on that part of his subject in the professional examinations.

He left Glasgow on becoming Professor of Botany in Edinburgh. There he discharged the duties of his office with great success and was much esteemed. Ultimately he dropped down dead while throwing a stone on a curling pond.

In days gone by field botany formed a very important part of the medical curriculum, for at that time numerous country practitioners were in the habit of gathering for themselves plants which were supposed to be of medicinal value and of making all sorts of preparations from them. To take two outstanding examples—coltsfoot was supposed to be good for certain diseases of the chest, and taraxacum was supposed to be of value for some diseases of the liver. Taraxacum even got its way into the *British Pharmacopœia*. I have only given two examples, but a reference to the text-books of that time will show that the plants used in medicine were very numerous. It therefore was necessary that practitioners who wished to avoid all risk of poisoning their patients should have a good knowledge of field botany.

Professor Dickson was succeeded by Professor Bailey Balfour, who introduced the teaching of modern botany into the University and was in all respects a capable and excellent teacher. Under his auspices a botanical laboratory was provided and the more recent botany began to be taught. Till lately the Chair was in the hands of Professor Bower. Nobody could come into contact with Professor Bower without recognising his genial and kindly qualities and his clear-headedness, and those who had the advantage of being his students are, so far as I know, unanimous in the opinion of his great merits as the Professor of Botany. Both by his teaching and by his writings he has earned for himself a very high place in the world of biological science.

## Ferguson the Chemist.

John Ferguson was a man of great and very varied erudition. In his early days he had taken copious notes of Sir William Thomson's lectures, and published them in pamphlet form. I have never been able to lay my hands on a copy of that little work, but I know that it was to many, who found themselves unable to battle successfully with the strong currents of Thomson and Tait, a harbour of refuge. In later years Professor McCallum of Toronto (subsequently of Montreal) was staying with me, and shortly after his arrival he informed me that he wanted to meet " Ferguson the Chemist." I could not think of anyone of that patronymic prominently associated with chemistry in the city. I therefore inquired as to how " Ferguson the Chemist " had made himself distinguished, and was told that he had written the catalogue of a chemical library and that no one would ever write on the history of chemistry again without finding that catalogue a mine of accurate and scholarly information. I at once, of course, recognised that " Ferguson the Chemist," who was now a man of world-wide reputation, was the Professor of Chemistry. He may not have been the best man in the world to teach what St. Paul would have called " the beggarly elements of chemistry " to elementary students, any more than is a Derby racehorse the best animal to turn a churn. The *Bibliotheca Chemica* has given Ferguson a prominent and permanent place in the history of chemistry, for it is obviously the work of a man who was a first-rate scholar. He was also keen on music, and would sometimes be seen at a concert with a full orchestral score beside him following the performance.

## JOHN CLELAND.

Cleland, who succeeded Allen Thomson, was a pupil of Goodsir, and before coming to Glasgow had held the Chair of Anatomy in Galway. He had a competent knowledge of anatomy, and had, in his younger days, published a very excellent elementary book on physiology. He was, however, a man of a violent temper, and frequently took offence when none was intended. On one occasion he was calling the roll of the junior class for the first time in the session. All went fairly well till he came to a name spelled Ginders. He pronounced the " g " hard (like " g " in good). " Mr. Ginders," said Johnnie. " It's a soft ' g,' " said the owner of the name. Thereupon Johnnie flew into a terrible passion and summoned the reprobate to appear before him at the end of the hour. When Ginders went down to interview Johnnie the following dialogue took place :—

Johnnie : " I have taught anatomy in Edinburgh and in Galway, and more recently here, and till to-day I had no idea that such impudent scoundrels as you seem to be had any existence, and I am going to report you to the Senatus Academicus."

Student : " But what have I done? "

Johnnie : " I called your name quite distinctly in the catalogue, and you had the d—d effrontery to tell me that it was a soft day."

Student : " I did nothing of the sort."

Johnnie : " There is no good telling a lie about a simple matter of that sort ; I would rather believe my own ears than a person like you."

Student : " I did not say it was a soft day. I said it was a soft ' g.' My name happens to be Ginders ('g ' as in the name George), not Ginders."

One of the funniest incidents that occurred during my time at the University was a triangular encounter between John Cleland, Sir George H. B. MacLeod, Professor of Surgery, and the Rev. Dr. Dickson, Professor of Divinity. Sir George MacLeod, popularly known as " the Duke," was a member of a very distinguished family, many of whom have occupied, and still continue to occupy, prominent positions in the Church of Scotland. So far as I am aware, Sir George MacLeod was the only member of that family who was prominent in medicine. He was a very handsome man, of a very friendly disposition, and was a good teacher of the surgery of that day. Sir George MacLeod's premises were just above those of John Cleland, and they were both situated at the north-east corner of the east quadrangle. The two Professors met each other, when the following conversation took place :—

Johnnie : " Oh, Sir George MacLeod, I am very glad to see you, for I have a crow to pluck with you ; fortunately the bird is not very large, nor perhaps its plumage very black, but all the same there is a stair going up to your department which passes immediately above my private room. It is a private stair for your own use, and no doubt for that of your assistants, but at present students ramp up and down that stair all day, and it disturbs me very much."

Sir George : " Cleland, that stair is mine; it was purposely put in the plans of Sir Gilbert Scott in order to afford me a private entrance up to my class-room, and I am going to use it in any way I think proper."

From that introduction the argument became very hot, and on both sides language was used which would be held unpardonable in a lady's drawing-room. While this was going on the Rev. Dr. Dickson, clad in gown and trencher, came out of his class-room and heard the angry arguments of the debaters. He sailed across in full style and said to the combatants, " Come, come, gentlemen, this is most unseemly —two learned professors holding such a very hot argument and using such language before all these students." Johnnie turned upon him at once and said, " Professor Dickson, everybody whom I have met since I came to Glasgow says that you are one of the most learned men that we have, and I quite believe the rumour is well founded; they also say that you are one of the most amiable men living, and I believe, from my personal experience, that that is quite true; but nevertheless and notwithstanding, you are simply a d—d fool to interfere between two men who are quarrelling."

## Lord Kelvin.

Volumes have been written about Lord Kelvin, then Sir William Thomson. Generally speaking, he was not supposed to be a good teacher. The fault did not lie with Kelvin. He certainly was not a man to teach satisfactorily elementary students unacquainted with mathematical studies. But even the most unappreciative student, from a technical point of view, could not help being interested in the intense enthusiasm of the man. The trouble was that he seemed to be under the delusion that other people were about as well informed as himself.

I once had the advantage of being for some weeks in the same hotel as Mr. Percival Frost, who was one of Kelvin's tutors at Cambridge. Mr. Frost told me that when Kelvin applied for the Chair in Glasgow Kelvin asked him for a testimonial. Mr. Frost informed me that he had refused to give one, and that, in doing so, he had said to Kelvin that he quite admitted that he was the most brilliant man he had ever known at Cambridge, but, at the same time, he was one of the worst tutors that he had ever met; and that as there was a great deal of elementary teaching to be done in connection with Scottish Chairs, he could not conscientiously recommend him for the post.

One of the most characteristic episodes in Kelvin's life was related by himself when he unveiled the statue of Mr. Joule, of Manchester. The speech will be found in one of the three volumes of popular lectures published during his own lifetime It is to be remarked that vol. iii appeared before vol. ii had been issued. Kelvin narrated to his audience at the unveiling how that, at a meeting of the British Association for the Advancement of Science held at Oxford, he had heard a young man read a paper, which paper seemed to contradict some views previously held on some thermal points. He met the young man afterwards at the British Association's Conversazione, and he spent the night closely examining this young man as to his new theories. They parted, hoping to meet on a very early occasion. The young man was none other than James Joule, of Manchester. Kelvin met him sooner than he expected. Shortly after the British Association meeting he was in Switzerland, and when walking down a hill one day he saw a charabanc coming up the steep hill with some of the passengers walking to ease the horses. One of the gentlemen walking was carrying something not unlike a stick, but Kelvin saw that it was neither an alpenstock nor an ordinary stick, something quite different. He recognised in the person of the holder Mr. Joule of Manchester. Mr. Joule had great pleasure in informing him that the stick he was carrying in his hand was a case filled with "beautifully made thermometers." He had not entrusted that case to the charabanc, but he had entrusted his newly married wife to it, for Joule was on his honeymoon; and the net result was that Kelvin and Joule made tracks for the Falls of Schaffhausen, and, as Kelvin informs the reader, spent some days measuring the differences of temperature at the top and the bottom of the celebrated fall. What became of Mrs. Joule during that performance I do not know, for it is not recorded in the Manchester speech. Kelvin probably thought that the rencontre was a special intervention of benign Providence.

In connection with the name of Joule another incident may be recorded. Kelvin had a habit, in his lectures, of wandering from the subject in hand into other cognate regions; one never knew what he would be at next. For two days he had been on heat, and made frequent references to Joule. The third day something took him and he called up a gentleman and began examining him on Newton's or Kepler's laws. The man knew nothing about them, and no blame to him, for they had not been mentioned in the class, but Kelvin showed great vexation of spirit, and, at long last, to help the man out of the difficulty, he asked him, "Do you not know who it was that first enunciated the law of universal gravitation?" The man evidently believed himself to be on firmer ground, for he complacently replied, "It was Mr. Joule of Manchester." Kelvin's face can be better imagined than described; it was anything but that of a satisfied examiner.

One funny incident may be recorded concerning the Rev. Dr. Dickson; it was in the early days when the Hertzian waves began to be used. Kelvin had an apparatus for their production and was sending out showers of Hertzian waves. When he was thus employed in the class-room his eye caught sight of the Rev. Professor Dickson walking along on his way to the Library, and he announced to the class that he was just deluging Professor Dickson with Hertzian waves, but that Professor Dickson was quite unaware of the process, for Professor Dickson was "not a receiver tuned for Hertzian waves."

Before leaving Kelvin I think it appropriate to quote a sentence from an article on heat written by him which appeared in the *Encyclopædia Britannica*, published in 1880. The sentence is very typical of a good deal of his writings, extreme accuracy of statement, clearness, and ample definition. In speaking of the transference of heat from one medium to another he says:—"It is important in engineering, and in many of the arts and manufactures involving thermal processes, and particularly in that one of them of greater everyday value to the human race than all the others put together, cookery, to know that for copper or iron boilers, or steam pipes, or pots, or frying pans, the transmission of heat from radiant burning coal or charcoal, or red or white hot fireclay or other solids, and from hot air in contact with them on one side, to hot water or steam or oil or melted fat on the other side, or hot liquid or steam on one side and cool air on the other side, is for practical purposes sensibly the same as if the thermal conductivity of the metal were infinite, or its resistance to the transmission of heat nothing."

## ANDREW BUCHANAN.

I just missed having Dr. Andrew Buchanan as my teacher of physiology. He was a frequent visitor at our house, and I knew the old gentleman thoroughly well. In his day the subject was called "The Institutes of Medicine," not Physiology, and was supposed, at any rate by him, to take in a large number of other subjects. Thus, he regarded it as part of his work to say a good deal about comparative anatomy, and he resented the appointment of a Professor of Zoology when he was teaching the Institutes of Medicine, as an infringement on his sphere. Unfortunately he was one of the men who remained too long in active life. My father attended his instruction when Andrew Buchanan was comparatively a young man, and the opinion my father formed of him was that he was one of the very first teachers of his day. It will astonish the modern student to know that Andrew Buchanan was also a Surgeon to the Glasgow Royal Infirmary, and as such invented the rectangular staff for lithotomy. He was a thoroughly cultured, well-informed man whose outlook was not limited to medicine, for he was in addition, as not infrequently happened at that time, the possessor of a well-educated and cultivated mind; he was essentially, in his early days, a very reputable member of the teaching staff of the University of Glasgow. As already indicated, he unfortunately remained too long at work, and his class developed into a sort of pandemonium, much to be regretted, for he entirely deserved a better fate.

Just one anecdote of that side of affairs may be of interest to the present generation. Dr. Andrew Buchanan did not believe in class examinations. He was strongly of opinion that a man might, by a mere effort of memory, accurately get up the contents of books and retain that information sufficiently long to be able to put it down on paper when the need arose, and yet be entirely destitute of anything like intellectual capacity. Instead of holding written examinations he used to give out subjects for essays, and on one occasion he gave out an essay on a newly discovered ape. He informed his students that " Some authorities said the animal was a catarrhine ape, others that it was a platyrrhine ape, and a third set of authorities were of the opinion that it was more nearly allied to the lemurs." The question of the essay was " Where would you place that ape, and what are the reasons for the position you may assign? " In due course the learned Professor got in numerous essays discussing the classification of this quadruped. After perusing them the worthy man came up to his class in anything but good humour and informed his students that one of their number had, for an essay, written these words :—" I would place the ape in the cage on the right-hand side as you enter the menagerie, for in that position I think it is likely to attract more public attention than in any other situation."

It is right to state that Dr. Andrew Buchanan was perhaps the first man who gave a reasoned account of the changes that take place in coagulation of the blood.

Dr. Buchanan was succeeded in the Chair by John Gray McKendrick, whose instruction I attended in his second year of office. McKendrick at once made radical changes of a very beneficial kind. At his own cost and expense he fitted out a laboratory and at once introduced practical physiological work into the University of Glasgow. I always found McKendrick to be a clear and excellent teacher, and his practical class, held in summer, was one of great value to medical students.

## William Mackenzie and the Rainys.

In connection with the name of Andrew Buchanan that of William Mackenzie has been mentioned. I suppose I am the only person connected with the Glasgow Eye Infirmary who remembers Mackenzie. He had a boy about my own age, and we both happened to be pupils in the Glasgow Academy, then in Elmbank Street. The building is now the Glasgow High School. I remember quite well seeing Mackenzie driving down to deposit his boy at the gate of the school. He died in the year 1866, when I was very young and had only been for two years at school. I was supposed by his widow to be a suitable playmate for his boy, and many a Saturday afternoon I spent in his son's company at their home, No. 1 Oakfield Terrace, Hillhead.

Mackenzie had a world-wide reputation, and in the main deserved it. He worked, of course, before the days when Lister taught that the source of true inflammation is micro-organic life. He is chiefly remembered by his prescriptions, particularly by a wash which contained a weak solution of corrosive sublimate. Had he lived in our own days he would have found that no germicide can be beneficially used in ophthalmic practice, for, were a germicide in solution strong enough to destroy germs, it would also destroy the transparency of the cornea. He was, however, a thoroughly well-educated, scholarly man, and not uninterested in the scientific side of his work, as is evinced by his book on *The Physiology of Vision*, published in London in 1841.

The ophthalmoscope was first invented about 1842, but Mackenzie never seems to have had any facility in its use, at least so I was informed by one or two of my colleagues when I was quite a junior at the Glasgow Eye Infirmary. These were men who had studied with Mackenzie in the Glasgow hospital and were acquainted with the work which he did. He certainly knew the older side of ophthalmology thoroughly well, and his book on *The Diseases of the Eye* was a creditable production, very much on a par with that written by Tyrrell of the Royal London Ophthalmic Hospital and published by Churchill about the same time.

The Glasgow School suffered a severe loss by the death of Dr. George Rainy. He was a son of Dr. Harry Rainy, Professor of Medical Jurisprudence in the University of Glasgow, and the grandson of the Rev. Dr. Rainy, Parish Minister of Creich in Sutherlandshire. George Rainy was a thoroughly well-educated man, and, in addition to that, he had a competent knowledge of optics, and was one of the first to write a monograph on the use of the ophthalmoscope. If my memory serves me rightly, that small monograph was a reprint from the *Glasgow Medical Journal*. George Rainy unfortunately caught fever from some patient in the Eye Infirmary in Charlotte Street and the malady ended fatally. He was the father of Dr. Harry Rainy, a well-known physician in

Edinburgh who died only a few years ago, a man built very much on the pattern of his father; a good clinician, with an excellent knowledge of physics and the necessary parts of mathematical science related thereto.

Harry Rainy, the father of George Rainy, and also the father of Principal Robert Rainy of the Free Church, was a very strong personality, and held both in esteem and awe by his students and, generally speaking, by those members of the Glasgow public with whom he came in contact. He had a very large practice as a physician, and certainly was a very erudite Professor of Medical Jurisprudence. He was much interested in the Glasgow Eye Infirmary in its early days. There are two busts on the outside of the buildings in Berkeley Street; one of them is a portrait of Harry Rainy and the other of William Mackenzie. He was regarded by many, and probably not unjustly, as a somewhat austere man, but he was very genuine, and below a somewhat stern exterior he concealed a good deal of genuine tenderness and affection. The late Dr. Finlayson once related to me a story which Harry Rainy used to tell against himself. I shall put it in the form of a narrative by Dr. Rainy. The said narrative accurately conveys the information I obtained from Dr. Finlayson, but although I use inverted commas I of course am not giving the actual words as used by Rainy. "After I had finished my studies in this my *Alma Mater* I crossed over to Paris to study in the hospitals there; I was accompanied on that journey by young Mr. Colquhoun of Luss, who was repairing to Paris to study jurisprudence. One day, while we were walking in the streets of Paris, something blew into Mr. Colquhoun's eye and injured it considerably. At Mr. Colquhoun's request I began to treat the eye, and after I had done so for some days I found that instead of improving it was getting worse, and I advised him to avail himself of the services of Mons. Dupuytren, then one of the most prominent surgeons in Europe. Mr. Colquhoun consented, and I called upon Mons. Dupuytren to ask him to visit my friend. He agreed to do so in the afternoon, and duly came. He looked at the eye and changed the line of treatment altogether. After doing so he took me into a room apart, and there began to curse and to swear, and said that as nearly as possible I had permanently destroyed the vision of that eye.

He did that every day for a fortnight. Mons. Dupuytren was the profanest and most blasphemous man that it has ever been my lot to meet, but his practical sagacity was of a very high order."

When Dr. Pagan, Professor of Midwifery before Dr. Leishman, became ill with what ultimately proved his last illness, Dr. Rainy was called to attend him. After Dr. Rainy had examined the patient, he announced that he thought that a good dose of castor oil would be of service. The invalid broke out into a torrent of strong language. For answer, Dr. Rainy turned round to the patient's wife and said, "Mrs. Pagan, would you go downstairs and bring me up the bottle and a spoon?" On their arrival a full dose was duly administered.

## JAMES FINLAYSON.

James Finlayson was one of the best teachers of his time, and was one of the Physicians to the Western Infirmary. He was methodical in all his work. There was no scamping a clinic under his auspices. He took the roll-call about five minutes past nine and then again about five minutes to eleven, and if a student were present at both he was counted present, but not otherwise. He gave an extra clinic on Saturday mornings, and took up some special line of study. Thus, one winter he gave demonstrations on electrical apparatus used in medicine. Another winter he took up the ophthalmoscope, and arranged for us a number of cases showing pathological changes in the fundus oculi. After I settled in Glasgow he was good enough to ask me to give these demonstrations on Saturday mornings on eye conditions relatively to medicine, and I did so for some years. Finlayson knew that work thoroughly well, and insisted that all the students who attended his clinic should at least have opportunities of using the ophthalmoscope and of appreciating its value. I always regarded him as one of the best amongst the many good physicians that Glasgow has had during my lifetime. He took pains to instruct his students in the preparation of invalid food. I think I see him yet, with a cooking utensil and a bit of meat, showing us how to prepare beef tea.

## Joseph Coats.

Pathological instruction came to be of prominent importance during my lifetime. In the old days at the Royal Infirmary, before the College was removed to Gilmorehill, there was no Professor or Lecturer on Pathology. The late Dr. Sam Moore used to make *post-mortem* examinations of cases at the Royal Infirmary, which examinations the students attended. When Dr. Joseph Coats was made Pathologist to the Western Infirmary he systematised pathological teaching. Ultimately he became Professor of Pathology at the University. He certainly was a most painstaking instructor. The pathology of that day, of course, was widely different from what it is now. There was no bacteriology, merely the macroscopic and microscopic examination of the products of disease. Dr. Coats had studied extensively in Germany, and knew the pathology of his day thoroughly well. He was a most capable teacher, and in addition to that was a man whose personal character secured the confidence and respect of his pupils. Under his auspices a good deal of practical work was done, but so long as I was with him there was no bacteriological work, for the science of bacteriology at that time did not exist.

## William Macewen.

Sir William Macewen had not joined the staff of the University during the time that I was a student, but, notwithstanding that, I got to know him and to know his work tolerably well. Very frequently on Saturdays, while an undergraduate, I went up to his clinic at the Royal Infirmary, and I also attended his work as Casualty Surgeon at the Central Police Office. At that time he was lecturing on Medical Jurisprudence at the Royal Infirmary School of Medicine, and he was much interested in the study of that subject. The Police Office clinic was a most interesting one. On a Saturday night it began about eight o'clock, and went on till two in the morning, sometimes later. It was a first-rate opportunity of seeing emergency surgery; and even there the bent of his mind in the direction of investigation was clearly shown. It was from the patients that he saw at that clinic that he got most of his material for the important communications which he made on pupilary reflexes. In those far-off days I saw in his wards a line of treatment which I had, up till then, seen nowhere else, and that for the simple reason that it was to be seen nowhere else. I remember a patient who had had his leg amputated. It was very carefully done, and much pains were taken to stop bleeding points and to adjust dressings very carefully. I ascertained that that wound had not been looked at again till the patient was about to be dismissed. That was an entirely different line of practice from anything I saw elsewhere. I do not mean to reflect in the least on the gentlemen who were conducting the other clinics, far from it; the work that they did was a credit both to their art and to themselves; but they had not fully appreciated the meaning of the work done by Pasteur and by Lister. In Macewen's hands that work developed into asepsis and not antisepsis, and it became possible to get wounds to heal well and quickly without the laborious and sometimes very painful frequent dressings.

When I first put up a plate with my name upon it, Sir William called one afternoon and asked me if I would make a nightly visit to a patient in my immediate neighbourhood, and I said I would. He explained that it was the case of a gentleman who had come from Southampton to be operated on for some condition of the feet. He had had some operative interference elsewhere before coming to Glasgow, but ultimately he had come to see Sir William and had been operated on. Sir William explained to me that he was a nervous man, and that if I would go across of an evening and take his temperature, feel his pulse, and console him, he thought it would be helpful to the patient. I began these nocturnal visitations, and when I was making my fourth or fifth visit the patient turned round to me and said, "What sort of man is Dr. Macewen?" I said to him that surely he must have satisfied himself on that point before he came all the way from Southampton. He then told me that when he had been previously operated on the surgeon in charge had dressed the wound every day, but that Dr. Macewen had not touched him since his operation; that on his way to the Royal Infirmary he looked in every morning. He asked the patient how he felt, took his temperature, felt his pulse, turned up the blankets and felt his feet, finally, put down his nose and smelt his feet, then said " Good morning " and took himself off. The ultimate result was admirable.

Sir William was appointed to the Royal Infirmary in 1877, and I saw cases being done by him with the strictest asepsis as early as 1879 or 1880; so it is probably correct to say that both the antiseptic system and the modern aseptic system in surgical work had their origin in the Royal Infirmary. To give an adequate idea of the variety and thoroughness of Macewen's work would extend this article to an inordinate degree. Some time or other a full account of his many activities should be written. One of the journals recording his death very truly said that British surgery had not encountered any such catastrophe since the death of John Hunter. To those who really knew him intimately he appeared not only as a good surgeon but also as a trustworthy and much-valued friend, possessed of clear vision and high intellectual qualities.

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